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**FAX COVER PAGE****August 29, 2006**

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**Re:** Serial No.: 10/051,902  
Our Ref: BB1163 US DIV

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**Pages:** 4 Including This Cover Sheet

**Clean Copy of Appendix A – pages 1-3**

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M.....	10	20	30	40	50	60	Consensus #1
MASDELAKAVERKKNV-----YASICALASNASVILGYDIGVMSG							SEQ ID NO20.pro
MSEGTNKAMSDPPPTTASKVADPDLKXPKRNKBPAPACATLASMTSVLLGYDIGVMSG							SEQ ID NO30 (GI 1778093).pro
MSBGTNKAMSDPPPTTASKVADPDLKXPKRNKBPAPACATLASMTSVLLGYDIGVMSG							U64903 (GI 1778094).pro
MITGEVS-----VDSYDTNKPKPKRNKYAFACALLASMSNLSLGYDTGVLSG							AF215837 (GI 12004315).pro
A..X.K.D...D.Q...GI...Y.L.GS...RTSD.IGR							Consensus #1
	70	80	90	100	110	120	
AAMYIKKDLNITDVQLEILIGLSLSLSPGSPAAGARTSIRIGRLTVVFPAAVTFVGSLL							SEQ ID NO20.pro
AITYLKBDWHISDTQIGVLVGLNITYCLPQSPAAGRTSDWIGRR							SEQ ID NO30 (GI 1778093).pro
AITYLKBDWHISDTQIGVLVGLNITYCLPQSPAAGRTSDWIGRR							U64903 (GI 1778094).pro
ASITYLKBDLHPSDVQIRIIGIINIYSLGSAIAGRTSDWIGRR							AF215837 (GI 12004315).pro
MG.A.N...LM.GRV.G.GVGY.MIAPVYTA.E..P..SRQPLT.FPBPFIN.G.LLGY							Consensus #1
	130	140	150	160	170	180	
NGPAVNYGMLMAGRFVAGVGYGNIAPVYTABISPAASRGFLTTPBPVGINIGILLGY							SEQ ID NO20.pro
NGPATNYAPLMVGRFVTGIGVGYALMIAPVYTABVSPASSRGFLTSPBPVPINAGILLGY							SEQ ID NO30 (GI 1778093).pro
MGPATNYAPLMVGRFVTGIGVGYALMIAPVYTABVSPASSRGFLTSPBPVPINAGILLGY							U64903 (GI 1778094).pro
MGLATNFAFLHFGRFVAGIGVGYAMNIAFPVYTABVAPSSSRGFLTSPBPVPINSGVLLGY							AF215837 (GI 12004315).pro
.SN.AF...P..L.WR.ML.IGA.PS..LA..V..MPSPRWL...GRL..A..VL...S							Consensus #1
	190	200	210	220	230	240	
LSNFAPARLPLHLGWRVMLAIGAVPSGLLALVPCNPESPRWLVLKGRLLADARAVALBKTS							SEQ ID NO20.pro
ISNLAFFSLPTHLSWRKFLGIGAIPIPIFLAIGVLANPESPRWLVMQGRLLGDAKKVLRIS							SEQ ID NO30 (GI 1778093).pro
ISNLAFFSLPTHLSWRKFLGIGAIPIPIFLAIGVLANPESPRWLVMQGRLLGDAKKVLRIS							U64903 (GI 1778094).pro
VSNFAFAKCPNLGLWRINLGIGAPPSVALAIVLYMPSPRNLVMQGRLLGDAKKVLRIS							AF215837 (GI 12004315).pro

PESPRWL or PESPRXL

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225	ATPEEAERLADIKAAAGIPKGLDGDVTVPEKKEGGGEBLVNKKLILSPTPAVRRILLS	SEQ ID NO20.pro
241	DSPBEAQLRLSRIKQTAGIPABCEDEDIKVEKTKIKSGN-AVWKBLFPNPTPAVRAVIA	SEQ ID NO30 (GI 1778093).pro
241	DSPBEAQLRLSRIKQTAGIPABCEDEDIKVEKTKIKSGN-AVWKBLFPNPTPAVRAVIA	U64903 (GI 1778094).pro
228	TSKBEAQRSLSDIKBAAGIDKDCNDV--VQVPRKTKDE-AVWKELILHPTKPRRAAIF	AF215837 (GI 12004315).pro

285	..G.HFPQQA.G.D.VV.VS.R.F..AGI...K.L..T.AVG.V.KT.FIL..TF.LJ..	Consensus #1			
310	320	330	340	350	360
285	AVGLHFPQQA.SGSDSVVQYSARLPKBSAGITDDNKLGLGVTCAVGVTCTPFIIVATFLLPRA	SEQ ID NO20.pro			
300	GIGIHFFQQA.SGIDAVVLYSPRIPOSAGITNARKQLLATVAVGVVKTLEILVATFQLPKY	SEQ ID NO30 (GI 1778093).pro			
300	GIGIHFFQQA.SGIDAVVLYSPRIPOSAGITNARKQLLATVAVGVVKTLEILVATFQLPKY	U64903 (GI 1778094).pro			
285	GIGIHFFQQA.SGIDAVVLYSPRIPOSAGITNARKQLLATVAVGVVKTLEILVATFQLPKY	AF215837 (GI 12004315).pro			

345	(R/K)XGR(R/K)	Consensus #1			
360	GRRL.L.S.GGM.....L...LTV.....KA..L.L.I.....FS.G.GPI				
370	380	390	400	410	420
345	GRRL.L.LISTGCMIVSLICLGGSLTVAGHHPDTKVAWAVALCISTLSYIAFFSIGLGP	SEQ ID NO20.pro			
360	GRRL.L.L.LISTGCMIVSLICLGGSLTVAGHHPDTKVAWAVALCISTLSYIAFFSIGLGP	SEQ ID NO30 (GI 1778093).pro			
360	GRRL.L.L.LISTGCMIVSLICLGGSLTVAGHHPDTKVAWAVALCISTLSYIAFFSIGLGP	U64903 (GI 1778094).pro			
345	GRRL.L.L.LISTGCMIVSLICLGGSLTVAGHHPDTKVAWAVALCISTLSYIAFFSIGLGP	AF215837 (GI 12004315).pro			

405	..VY.SR.PPL..RA.G..GVA.NR..S..I...F.....T.GG.F.L....A...W	Consensus #1			
430	440	450	460	470	480
405	TGVYTBBIPLQVRALGPAVGVA.SNRVTS.AVISMTFLSLSKAITIGSSPFLVSGIAAVAR	SEQ ID NO20.pro			
419	TWVYSSEVPPLRLBAQGTBNGVAVNRVSGVISIFPLPLSKKITTGGAFFLPGGIAIIM	SEQ ID NO30 (GI 1778093).pro			
419	TWVYSSEVPPLRLBAQGTBNGVAVNRVSGVISIFPLPLSKKITTGGAFFLPGGIAIIM	U64903 (GI 1778094).pro			
404	AVVYSSEVPPLRLBAQGTBNGVAVNRVSGVISIFPLPLSKKITTGGAFFLPGGIAIIM	AF215837 (GI 12004315).pro			

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PETQGRXXE – SEQ ID NO20 has an R in place of the Q (similar to sugar beet sequences)

.P..T..		PBT.GR.LB.	..LB.....					Consensus #1					
		490	500	510	520	530	540						
465	VFFTCI	PETRGRTLE	NGKLE	-----	MPDTGMABE	EDAAKBY	-----	VELP	SEQ ID NO20.pro				
479	PEFLTPE	PETRGRTLE	MHLE	ED-PR	MRES	PPGN-KS	NDEN	STRKQ	QNGNDKSQVQLG	SEQ ID NO30 (GI 1778093).pro			
479	PEFLTPE	PETRGRTLE	MHLE	ED-PR	MRES	PPGN-KS	NDEN	STRKQ	QNGNDKSQVQLG	U64903 (GI 1778094).pro			
464	VFMVTNE	PBTQGRNLE	ELBL	FGSY	FGNR	KTKLDL-KA	KAABA	KSRBS	-----	AF215837 (GI 12004315).pro			
.....													
550													
.....													
511	SSK										SEQ ID NO20.pro		
537	BTSTTVNDNH										SEQ ID NO30 (GI 1778093).pro		
537	BFTBSV-----QV										U64903 (GI 1778094).pro		
512	-----EV										AF215837 (GI 12004315).pro		

The boxed residues correspond to the sequences conserved in the sugar transporter subfamily of the major facilitator superfamily (MFS).

Shade (with black at 40% fill) residues that match SEQ ID NO20 (corn) exactly.  
\*Shading removed on August 28, 2006

Consensus #1: When all match the residue of the Consensus show the residue of the Consensus, otherwise show '..'